

Benefits and harms of antenatal and newborn screening programmes in health economic assessments: the VALENTIA systematic review and qualitative investigation

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Plain language summary

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Every year the NHS offers pregnant women screening tests to assess the chances of them or their unborn baby having or developing a health condition. It also offers screening tests for newborn babies to look for a range of health conditions. The implementation of screening programmes and the care for women and babies require many resources and funding for the NHS, so it is important that screening programmes represent good value for money. This means that the amount of money the NHS spends on a programme is justified by the amount of benefit that the programme gives. We wanted to see whether researchers consider all the important benefits and harms associated with screening of pregnant women and newborn babies when calculating value for money. To do this, we searched all studies available in developed countries to identify what benefits and harms they considered. We also considered the views of parents and healthcare professionals on the benefits and harms screening that creates for families and wider society.

We found that the identification of benefits and harms of screening is complex because screening results affect a range of people (mother–baby, parents, extended family and wider society). Researchers calculating the value for money of screening programmes have, to date, concentrated on a narrow range of benefits and harms and ignored many factors that are important to people affected by screening results. From our discussions with parents and healthcare professionals, we found that wider impacts on families are an important consideration. Only one study we looked at considered wider impacts on families. Our work also found that parent’s ability to recognise, absorb and apply new information to understand their child’s screening results or condition is important. Healthcare professionals involved in screening should consider this when supporting families of children with a condition.

We have created a list for researchers to identify the benefits and harms that are important to include in future studies. We have also identified different ways researchers can value these benefits and harms, so they are incorporated into their studies in a meaningful way.

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This article

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